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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,469	07/14/2000	Michael P. Lyle	RECOP004	6458

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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 04/06/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/616,469

Applicant(s)

LYLE ET AL.

Examiner

Matthew Heneghan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1, 6, and 7 have been amended in response to the first office action.  
Claims 1-7 have been examined.

***Drawings***

2. The drawings were received on 8 March 2004. These drawings are acceptable.

***Specification***

3. In view of applicant's amendments to the specification, all previous objections to the specification are withdrawn.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Details about what would specifically constitute a "packet that would be sent if the connectionless port were not in use," critical or

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essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Applicant discloses that an ICMP packet may be used, but does not specify which types of ICMP packets would be suitable. For purposes of the prior art search, it is being presumed that this functionality refers to any ICMP packet, or its equivalent in other network protocols.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the packet that would be sent if the port were not in use" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. For purposes of the prior art search, it is being presumed that this phrase reads as "the packet that would be generated by the computer."

### ***Claim Rejections - 35 USC § 102***

6. In view of Applicant's amendments in response to the first office action, all rejections under 35 U.S.C. 102 have been replaced by rejections under 35 U.S.C. 103.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson, RFC 1826, "IP Authentication Header," 1995 in view of U.S. Patent No. 5,619,645 to Montenegro et al.

Regarding claims 1, 2, 4, 6, and 7, Atkinson discloses a device connection supporting connectionless ports, such as UDP (see page 5, figure 2), wherein packets have authorization data that is keyed directly (see page 7, section 4, first paragraph), and authentication failures trigger a response using ICMP (see page 10, last paragraph).

Atkinson does not disclose the sending of a message portraying a port as not being in use in the event of a failure.

Montenegro discloses a system fast-fail technique wherein an ICMP message that is equivalent to Host Unreachable, which is commonly used to denote ports that are not in use, is sent automatically in the event of a failure (see column 5, lines 23-45). Montenegro further discloses that because of this, there are no futile attempts to retry the failed network operation (see column 3, lines 3-10).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Atkinson by sending an ICMP message that is equivalent to Host Unreachable, as disclosed by Montenegro, so that there are no futile attempts to retry the failed network operation.

Regarding claim 5, devices capable of utilizing TCP/IP as disclosed by Atkinson are inherently computerized.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson, RFC 1826, "IP Authentication Header," 1995 in view of U.S. Patent No. 5,619,645 to Montenegro et al. as applied to claim 1, and further in view of U.S. Patent No. 5,633,933 to Aziz.

Atkinson does not disclose where the key is generated, stating instead that this is application-specific.

Aziz discloses a key-management scheme in which the first node may retrieve the authentication key from a local cache (see abstract), and suggests that this scheme in connectionless protocols prevents crackers from monitoring the transfer of data in the clear.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Atkinson by using the key management scheme disclosed by Aziz, in order to prevent crackers from monitoring the transfer of data in the clear.

***Response to Arguments***

9. Applicant's arguments filed 8 March 2004 have been fully considered but they are not persuasive.

Regarding Applicant's arguments to the rejections under 35 U.S.C. 112, first paragraph, see Paper No. 9, pp. 11-12, the ICMP protocol comprises several dozen types of different messages, each having a different sub-code and a unique meaning. Some, but not all, of the known messages have meanings that might be appropriate in the context of the instant invention. Though it is clear that the invention would use a known sub-code when generating an ICMP message, the functionality described in the instant application does not clearly conform to any one of the well-known definitions for the ICMP functions; therefore, it is necessary for the specification to designate a particular sub-code within ICMP in order for the disclosure to be enabling.

Regarding the previous rejections under 35 U.S.C. 102 and 103, Applicant's amendment has necessitated the replacement of the previous rejections with new grounds of rejection, as described above.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,687,833 to Osbourne et al. discloses a system for sending pseudo ICMP messages for responding to computer attacks.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (703) 305-7727. The examiner can normally be reached on Monday-Thursday from 8:00 AM - 4:00 PM Eastern Time. The examiner can also be reached on alternate Fridays.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, DC 20231

**Or faxed to:**

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MEH *MEH*

April 2, 2004

*Gregory Morse*  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100